

REMARKS

Claims 1, 2, 3, 4, 5, 18, 20, 22, and 23 have been amended. Claim 19 has been cancelled. Claims 1-18 and 20-24 remain in the application. Further examination and reconsideration of the application, as amended, is hereby requested.

In Section 3 of the Office Action, claim 1 was rejected under 35 USC 103(a) as being unpatentable over Lewis take with Gibbon. Applicants respectfully traverse this rejection as Lewis and Gibbon do not disclose Applicants' claimed invention nor is there motivation to even combine them.

Applicants are claiming "generating a first sub-frame and a second sub-frame *based on combinations of pixel values* from the image data." Gibbon is silent as to how the first and second sub-frames are generated. Lewis describes creating sub-frames not on combination of pixel values from the image data but rather as "sub-combinations" of pixel values in that it dissects each byte (or word) in a pixel value into individual bit segments which are presented to the actual pixels. So, rather than combining different bytes (or words) of pixel values from the image data to create a byte (or word) of pixel data for each sub-frame, Lewis takes a single byte from the image data for a pixel and presents it to a pixel in the display one byte at a time for a time period related to the binary weight of the pixel bit. (See Lewis's Table 1, and col. 16, lines 1-11).

Further, the sub-frame definition of Lewis is entirely different than the sub-frame definition of Gibbon and the Applicants' invention. Accordingly, there is no motivation for one of ordinary skill to even combine the references since the sub-frames of Lewis are not directed to lower resolution sub-frames of the original image as in Gibbon. There is no reason to display the sub-frames of Lewis in a different spatially offset position as the purpose of Lewis's sub-frames is to time average the K grey level image data at a particular pixel and not to increase resolution. Modifying Lewis to spatially offset its sub-frame of individual bits would make it inoperable for its intended purpose of averaging K grey level image data and thus the combination is improper.

Applicants, however, have amended claim 1 to further distinguish and define their invention over the other art made of record. Claim 1 now includes the limitation wherein the image data has "a first resolution" and the first and second sub-frames have a "second resolution" having a "area equal to the image data." Further, the resolution of the sub-frames match the resolution of the display device as noted in the specification on page 7, lines 20-27. Applicants have also

amended claim 1 where the method includes "controlling an image shifter to allow for alternating between displaying" the sub-frames on the display device in spatially offset positions as noted in the specification on page 8, lines 17-21, and lines 28-31 to page 9, lines 1-7.

5 Accordingly, claim 1, as amended, is believed patentable over the art made of record and withdrawal of the rejection is respectfully requested.

10 In Section 4 of the Office Action, the Examiner rejected claim 11 under 35 USC 103(a) as being unpatentable over Lewis taken with Gibbon as applied to claim 1 and further in view of Hong. Claim 11 is believed patentable for the reasons given above that the combination of Lewis and Gibbon is improper. Accordingly claim 11 is believed patentable over the art made of record and withdrawal of the rejection is respectfully requested.

15 In Section 5 of the Office Action, claim 18 was rejected under 35 USC 103(a) as being unpatentable over Gibbon et al. taken with Queiroz et al. in view of Machida. Claim 18 has been amended to better define and distinguish over the art made of record. Claim 18, similar to allowed claim 3, now includes the limitation of " wherein the first and second sub-frames *each include a plurality of*
20 *pixels*, each pixel of the plurality of sub-frames *assigned a value based on a weighted sum of combinations of the pixels in each identified block* of pixels in the first image." This limitation is not disclosed, taught, or suggested by the art made of record. Withdrawal of the rejection under 35 USC 103(a) for claim 18, as amended, is respectfully requested.

25 In Section 6 of the Office Action, claim 19 was rejected under 35 USC 103(a) as being unpatentable over Gibbon taken with Queiroz in view of Machida in view of Nagumo. Claim 19 has been cancelled.

30 In Section 7 of the Office Action, claim 21 was rejected under 35 USC 103(a) as being unpatentable over Gibbon taken with Quieroz in view of Machida in view of Hong. Claim 21 is believed patentable based on the patentability of claim 18 from which it depends.

35 In Section 9 of the Office Action, claim 23 was rejected under 35 USC 101 as being directed to non-statutory subject matter. Applicants have amended claim 23 as suggested by the Examiner. Applicants have further amended claim 23 to further distinguish and define their invention over the art made of record. Claim 23 has been similarly amended as allowed claim 3 to include the limitations of "wherein *each of the plurality of sub-frames each include a plurality of pixels*, by

assigning a value to each pixel in the plurality of sub-frames based on weighted sums of the pixels in each identified set. of pixels." Accordingly, claim 23, as amended, is also believed patentable over the art made of record even though no formal rejection on the art made of record was noted. Claim 24 is believed
5 patentable based at least on the patentability of claim 23 from which it depends. Withdrawal of the rejection under 35 USC 101 is respectfully requested.

In Section 11 of the Office Action, the Examiner indicated that claims 2-10, 12, 20 and 22 were objected to as being dependent upon a rejected base claim
10 but allowable if placed in independent format including all the limitations of the base and any intervening claims. Applicants wish to express their appreciation to the Examiner for this indication of allowance. Applicants have placed claims 2, 3, 20, and 22 in independent format as requested. Applicants have amended claim 4 and 5 to now depend from claim 3. Allowance of these claims is respectfully
15 requested.

In Section 12 of the Office Action, the Examiner indicated that claims 13-17 were allowable. Applicants wish to again express their appreciation to the Examiner for this indication of allowance.
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The prior art made of record but not relied upon by the Examiner has been reviewed, but is no more pertinent to Applicants' invention than the cited references for the reasons given above.

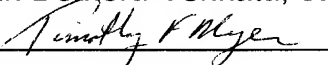
Applicants believe their claims as amended are patentable over the art of record, and that the amendments made herein are within the scope of a search properly conducted under the provisions of MPEP 904.02. Accordingly, claims 1-18, and 20-24 are deemed to be in condition for allowance, and such allowance is respectfully requested.
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If for any reason the Examiner finds the Application other than in a condition for allowance, the Examiner is respectfully requested to call Applicants' undersigned representative at the number listed below to discuss the steps necessary for placing the application in condition for allowance.
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The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 08-2025. Should such fees be associated with an extension of time, Applicants respectfully request that this paper be considered a petition therefore.

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Hewlett-Packard Company
Legal Department
1000 NE Circle Blvd.
Corvallis, OR 97330
Telephone: (541)715-4197
Fax: (541)715-8581

Respectfully Submitted,
Niranjan Demera-Venkata, et al.
By: 
Timothy F. Myers
Patent Attorney
Registration No. 42,919